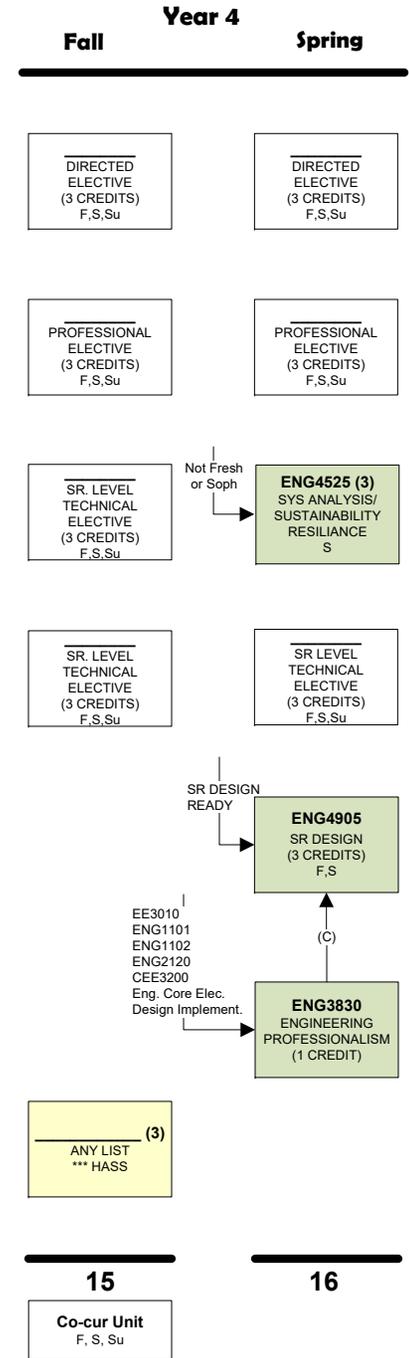
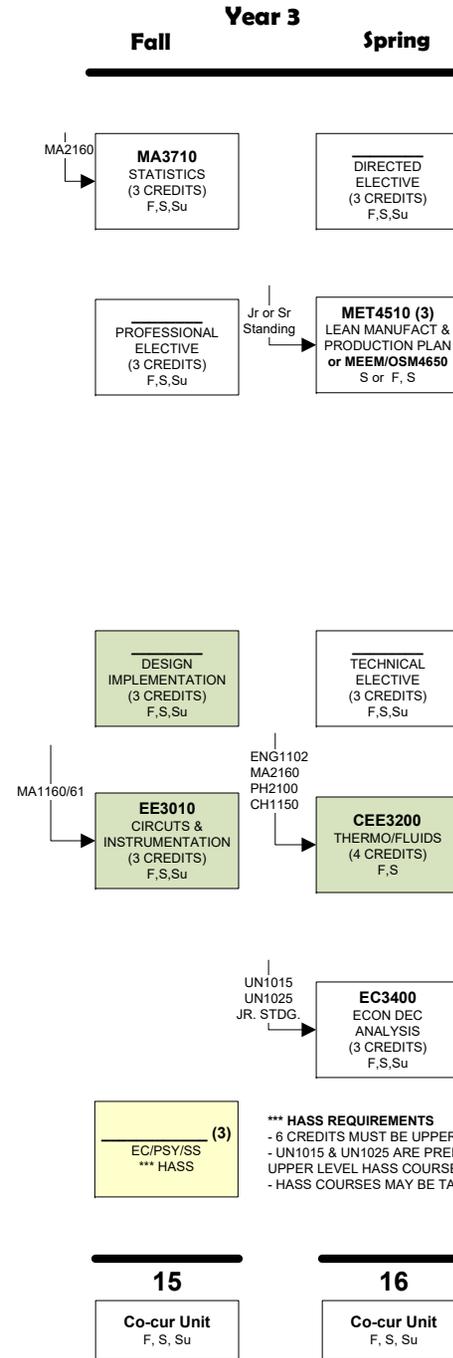
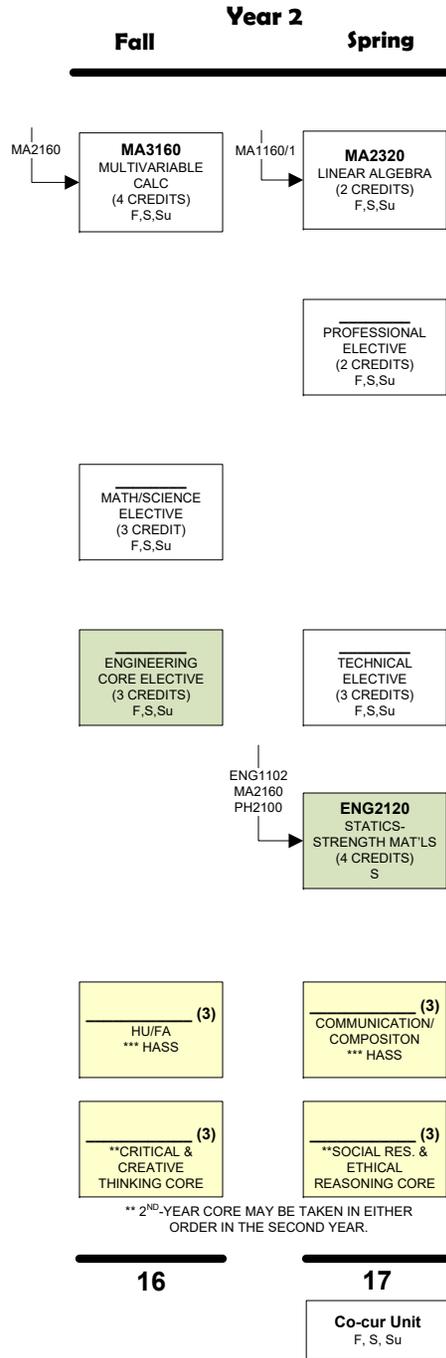
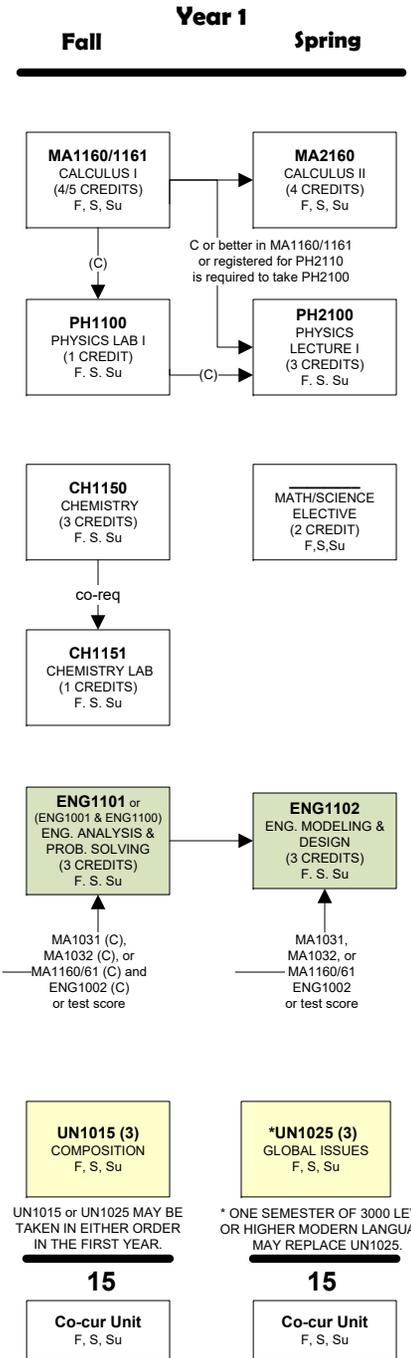
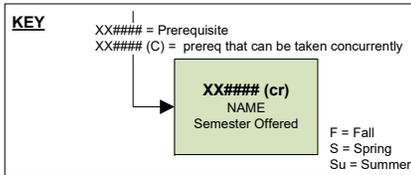


# BSE with Individualized Emphasis 2023/24

Updated September 2023

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

See back of academic plan for more information on requirements for elective courses.



**BSE Individualized Emphasis 2023-24**  
**(minimum of 125 credits)**

*Academic questions: E-mail eadvise@mtu.edu*

- 1 Senior Design **Prerequisite courses:**  
 ENG1101, ENG1102, ENG2120, CEE3200, ENG3830 (C), EE3010,  
 Eng. Core Elective, and Engineering Design Implementation.
- 2 General Education Requirements (24 credits + 3 PE units):

**I. Core Courses (12 credits)**

\_\_\_ UN1015 Composition

\_\_\_ UN1025 Global Issues or 3000+ Modern Language \_\_\_\_\_

\_\_\_ Critical/Creative Think List \_\_\_\_\_

\_\_\_ Social Resp./Ethical Reason List \_\_\_\_\_

**II. HASS Courses Requirements (12 credits)**  
*(www.admin.mtu.edu/em/documents/HASS Distribution List.pdf)*

- 6 credits upper level (3000- 4999)
- 3 credits from each listed below

\_\_\_ Communication/Composition \_\_\_\_\_

\_\_\_ Humanities/Fine Arts List (HU/FA)\*\* \_\_\_\_\_

\_\_\_ Social & Behavioral Science List (EC/PSY/SS)\*\* \_\_\_\_\_

\_\_\_ 3 credits from any list\*\* \_\_\_\_\_

\* **EC3400** is required by the degree, and may **NOT** be counted as a Social Resp./ Ethical Reason or HASS course.

**III. Co-curricular activities (3 units)**

In the co-curricular requirement, the three semester units will be physical education activities. These units are required for graduation, but are not included in the calculation of the GPA, nor in the overall degree-credit requirement. Note: most physical education activities will last for 7 ½ weeks or ½ semester. A student would need **six** of these ½-semester units to fulfill the 3-semester unit co-curricular requirement.

PE \_\_\_\_\_ PE \_\_\_\_\_ PE \_\_\_\_\_

PE \_\_\_\_\_ PE \_\_\_\_\_ PE \_\_\_\_\_

3 Engineering Design Implementation (select 3 credits):

\_\_\_ CEE3332 \_\_\_ GE3880 \_\_\_ MEEM3600

4 Engineering Core Elective (select 3 credits):

\_\_\_ CEE3101 \_\_\_ CS1121 \_\_\_ ENG2505 \_\_\_ GE2300 \_\_\_ MSE2100\*

5 Quality Control Elective (select 3 credits):

\_\_\_ MET4510 \_\_\_ MEEM4650 \_\_\_ OSM4650

6 Math/Science Elective (select 4-5 credits)\*:

\_\_\_\_\_

7 Technical Electives (15-16 credits)\*:

Select 15 to 16 engineering credits at the 3000+ level in a coherent plan of study that is approved by the Academic Advisor for the Bachelor of Science in Engineering program, Department Chair of Engineering Fundamentals and Academic Dean for the College of Engineering. 12 credits must be 4000+ level.

\_\_\_\_\_

\_\_\_\_\_

8 Directed Electives (9 credits):

Select 9 credits in a coherent plan of study such as partial fulfillment of a university approved minor, or a self-defined program with the advice of the BSE Academic Advisor.

\_\_\_\_\_

9 Individualized Electives (11 credits):

Select 11 credits in a coherent plan of study that is approved by the Academic Advisor for the Bachelor of Science in Engineering program, Department Chair of Engineering Fundamentals, and Academic Dean of the College of Engineering.

\_\_\_\_\_

\* If MSE2100 selected, then 4 credit Math/Science Elective and 16 credits Technical Electives needed.